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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,066	09/16/2003	Jongill Hong	0941.68363	3251

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EXAMINER
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BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/664,066	Applicant(s) HONG ET AL.	
	Examiner Kevin M Bernatz	Art Unit 1773	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 18 April 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) a set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: none.
- Claim(s) objected to: 3.
- Claim(s) rejected: 1-13.
- Claim(s) withdrawn from consideration: none.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

Continuation of 3. NOTE: while the Examiner acknowledges each individual component of the proposed amendment has been examined separately (i.e. the previous subject matter of dependent claims 3, 4 and 9), the Examiner notes that applicants have created several new embodiments by the proposed amendment (e.g. an embodiment requiring all of the limitations of dependent claims 3, 4 and 9 simultaneously). These new embodiments require further consideration and/or search since they were not previously examined.

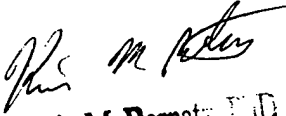
Continuation of 11. does NOT place the application in condition for allowance because: applicants arguments have been considered but are not persuasive since they pertain to the non-entered amendment. In so far as they apply to the rejections of record, applicants argue that claims 1 and 3 are of a different scope and that Ex Parte Slob does not support the Examiner's position. The Examiner respectfully disagrees.

The Examiner first notes that no 112 1<sup>st</sup> or 112 2<sup>nd</sup> Paragraph rejections have been made on claims 1 and 3. While the Examiner appreciates applicants' corollary to a 112 1<sup>st</sup> Paragraph enablement situation, the Examiner deems that applicants' specification provides sufficient enablement for the disclosed metals which meet the functional limitation of "improves GMR performance of the magnetoresistive spin-valve sensor". As stated by applicants, the issue is the scope afforded the functional language above. In this regard, Ex Parte Slob supports the Examiner's position that the specification can and should be utilized to determine the scope of claimed functional language, specifically the Board in Ex Parte Slob states: "We consider the holding in Austenal Laboratories, Inc. v. Nobilium Processing Company, 115 USPQ 44, is especially pertinent here, that claims merely setting forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future and which would impart the desired characteristics". The Examiner agrees with the Board in so far as "functional" language should be carefully considered when examined, since applicants are not entitled to coverage of "any conceivable combination of ingredients either presently existing or which might be discovered in the future" which do not meet the requirements of 35 U.S.C. 112 1<sup>st</sup> Paragraph, scope of enablement. The Examiner disagrees with the Board that such language is necessarily indefinite and/or vague, since the Examiner notes that current policy dictates that claims be given the broadest reasonable definition consistent with the written description. As such, applicants have provided clear enablement and definiteness for the list of materials in claim 3. However, outside of these materials, it is the Examiner's opinion that a similar situation to that in Ex Parte Slob exists, that applicants are attempting to cover "any conceivable combination of ingredients either presently existing or which might be discovered in the future" which applicants did not have possession of at the time of filing. Therefore, such scope cannot be read into the claims and the Examiner maintains his position on the scope afforded the language "a metal which improves GMR performance of the magnetoresistive spin-valve sensor".

Regarding applicants' allegation of the definition of "effective magnetic layer thickness", the Examiner notes that applicants' as-filed disclosure has no support for such a definition and applicants have provided no evidence supporting their alleged definition. Furthermore, the Examiner notes that the present claims do not require a multilayer magnetic layer, and even in the case of a multilayer magnetic layer, a single sublayer could still read on the proposed language utilizing applicants' alleged definition.

Finally, applicants argue that the Examiner has not provided sufficient motivation for why one of ordinary skill in the art would utilize a mixed alloy layer versus a single element layer. The Examiner respectfully disagrees.

Applicant(s) are reminded that "the test for obviousness is not whether features of the secondary reference may be bodily incorporated into the primary reference's structure, nor whether the claimed invention is expressly suggested in any one or all of the references, rather the test is what the combined teachings would have suggested to those of ordinary skill in the art." *Ex parte Martin* 215 USPQ 543, 544 (PO BdPatApp 1981). In the instant case, applicants are reminded that one of ordinary skill in the art would be motivated to make and use the claimed alloys in searching for a conductive metal given that all three elements are disclosed as being suitable for the intended use. The necessary motivation rises from **the expectation that similar compounds will have similar properties**. *In re Payne*, 606 F.2d 303, 203 USPQ 245 (CCPA 1979). In the instant case, that Examiner deems that one of ordinary skill in the art would reasonably expect that Au, Cu and Ag would have similar properties to AuCu, AgCu and AuAgCu given that applicants' claims are open to any composition of the alloys. Given that it is reasonable to expect these alloys to have similar properties (i.e. are equivalent conductive metal layers), applicants are reminded that substitution of equivalents requires no express motivation as long as the prior art recognizes the equivalency. *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 85 USPQ 328 (USSC 1950).

  
Kevin M. Bernate, P.D.  
Primary Examiner